

Listing of Claims

Claims 1-5. (Canceled).

6. (Previously Presented) A method for interconnecting a functional expansion module to a portable electronic host device, comprising:

detecting interconnection of the functional expansion module to the portable electronic host device;

checking if the portable electronic host device has previously stored data relating to necessary procedures for activating that functional expansion module and setting that functional expansion module to act as an expanded user interface for the portable electronic host device;

if so, implementing the previously stored data for activating and setting;

if not, interfacing for communication between the functional expansion module and the portable electronic host device to determine the necessary procedures, wherein interfacing comprises:

identifying applications resident on the portable electronic host device;

checking whether an expansion user interface functionality provided by the functional expansion module is applicable to one or more of the host device applications;

searching, with respect to each applicable host device application, for modes and user interfaces needed for use in implementing the expansion functionality through that application; and

defining a vocabulary of correspondence between a minimum of expanded user interface functions provided by the functional expansion module and a minimum of user interface functions demanded by the host device; and

storing those necessary procedures by the portable electronic host device for subsequent use in connection with a later detected interconnection of that functional expansion module so as to obviate the need to interface at each detected interconnection in order to set that functional expansion module for use by the portable electronic host device.

7. (Previously Presented) The method of claim 6 wherein the necessary procedures comprise certain procedures implemented in order to activate the functional expansion module and set up the function expansion module for use in cooperation with the host device.

8. (Previously Presented) The method of claim 6 wherein the modes needed for use comprise listing user interface commands for resident applications that can be extended to the expanded user interface operation of the functional expansion module.

9. (Previously Presented) The method of claim 6 wherein the modes needed for use comprise the implementation of fresh resources by the host device to support operation of the functional expansion module.

Claims 10-15. (Canceled).

16. (New) Apparatus, comprising:

a functional expansion module; and

a portable electronic host device including:

a processor that is operable to respond to a detected interconnection of the functional expansion module to the portable electronic host device by checking if the portable electronic host device has previously stored data relating to necessary procedures for activating that functional expansion module and setting that functional expansion module to act as an expanded user interface for the portable electronic host device, that previously stored data for activating and setting implemented if present;

an interface for communication between the functional expansion module and the portable electronic host device to determine the necessary procedures, if the data for activating and setting is not present,

the processor further operating to:

identify applications resident on the portable electronic host device;

check whether an expansion user interface functionality provided by the functional expansion module is applicable to one or more of the host device applications;

search, with respect to each applicable host device application, for modes and user interfaces needed for use in implementing the expansion functionality through that application; and

define a vocabulary of correspondence between a minimum of expanded user interface functions provided by the functional expansion module and a minimum of user interface functions demanded by the host device; and

wherein the portable electronic host device includes a memory for storing those necessary procedures for subsequent use in connection with a later detected interconnection of that functional expansion module so as to obviate the need to interface at each detected interconnection in order to set that functional expansion module for use by the portable electronic host device.

17. (New) The apparatus of claim 16 wherein the necessary procedures comprise certain procedures implemented in order to activate the functional expansion module and set up the function expansion module for use in cooperation with the host device.

18. (New) The method of claim 16 wherein the modes needed for use comprise listing user interface commands for resident applications that can be extended to the expanded user interface operation of the functional expansion module.

19. (New) The apparatus of claim 16 wherein the modes needed for use comprise the implementation of fresh resources by the host device to support operation of the functional expansion module.